

In the Claims

Please amend the claims as follows:

1. (Currently amended) An antiserum or an antibody or fragment thereof that ~~specifically~~ recognizes Fibrinopeptide B (FPB) peptides and/or des-arginine Fibrinopeptide B (des-arginine FPB) peptides defined by comprising amino acid sequence sequences SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 or ~~or~~ [[and]] SEQ ID NO:6, wherein the ratio of IC₅₀ of fibrinogen to IC₅₀ of FPB for said antiserum, or antibody or fragment thereof is at least 0.34 ~~antibody or fragment thereof has an IC₅₀ for fibrinopeptide B and an IC₅₀ for des-arginine fibrinopeptide B, wherein the IC₅₀ for FPB differs from the IC₅₀ for des-arginine fibrinopeptide B by less than 25%.~~
2. (Original) The antibody or fragment thereof of claim 1, wherein the fragment thereof is an Fab, F(ab)₂, or Fv fragment.
3. (Original) The antibody or fragment thereof according to claim 1, wherein the antibody or fragment thereof is attached to a substrate.
4. (Original) The antibody or fragment thereof according to claim 3, wherein the substrate is a gel, hydrogel, resin, bead, nitrocellulose, nylon filter, microtiter plate, culture flask, or polymeric material.
5. (Original) The antibody or fragment thereof of claim 1, further comprising a detectable moiety.
6. (Original) The antibody or fragment thereof of claim 5, wherein the detectable moiety is a radionuclide, enzyme, specific binding pair component, colloidal dye substance, fluorochrome, chemiluminescent substance, electrochemiluminescent substance,

- electroactive agent, reducing substance, latex, digoxigenin, metal, particulate, dansyl lysine, antibody, protein A, protein G, electron dense material, or chromophore.
7. (Original) The antibody or fragment thereof of claim 1, wherein the antibody is a monoclonal antibody.
8. (Original) The antibody or fragment thereof of claim 1, wherein the antibody is a polyclonal antibody.
9. (Currently amended) A hybridoma ~~continuous~~ cell line that produces the an antibody of claim 1 ~~that specifically recognizes Fibrinopeptide B (FPB) peptides defined by amino acid sequences SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6, wherein the antibody has an IC50 for fibrinopeptide B and an IC50 for des-arginine fibrinopeptide B, wherein the IC50 for FPB differs from the IC50 for des-arginine fibrinopeptide B by less than 25%.~~
10. (Currently amended) The hybridoma ~~continuous~~ cell line of claim 9, wherein the cell line is a monoclonal ~~hybridoma~~ cell line.
11. (Currently amended) A diagnostic method for detecting thrombotic or thromboembolic disease in a patient comprising:
- (a) contacting a physiological sample suspected of containing fibrinopeptide B (FPB) peptide and/or des-arginine FPB peptide with an amount of detection agent specific for FPB and/or des-arginine FPB peptides to form an FPB:detection agent complex, wherein the detection agent is the antiserum, antibody or fragment thereof of claim 1 ~~has an IC50 for fibrinopeptide B and an IC50 for des-arginine fibrinopeptide B, wherein the IC50 for FPB differs from the IC50 for des-arginine fibrinopeptide B by less than 25%; and~~

- (b) detecting a presence ~~or amount~~ of FPB and/or des-arginine FPB: detection agent complex peptides present in the sample to determine whether the patient has thrombotic or thromboembolic disease.
12. (Original) The diagnostic method of claim 11, further comprising removing fibrinogen from the physiological sample.
13. (Original) The diagnostic method of claim 11, wherein the thrombotic or thromboembolic disease is a deep venous thrombosis (DVT) or a pulmonary embolism (PE).
14. (Original) The method of claim 11 wherein the physiological sample is a fluid.
15. (Original) The method of claim 14 wherein the fluid is blood plasma.
16. (Original) The method of claim 15 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 5 ng/ml is reported as indicative of thrombotic or thromboembolic disease.
17. (Original) The method of claim 15 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 10 ng/ml is reported as indicative of thrombotic or thromboembolic disease.
18. (Original) The method of claim 14 wherein the fluid is urine.
19. (Original) The method of claim 18 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 50 ng/ml is reported as indicative of thrombotic or thromboembolic disease.

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20. (Original) The method of claim 18 wherein a concentration of FPB and/or des-arginine FPB peptides in the sample above 100 ng/ml is reported as indicative of thrombotic or thromboembolic disease.
21. (Currently amended) The method of claim 11 wherein the antibody or fragment thereof ~~detection agent~~ is an Fab, F(ab)₂, or Fv fragment.
22. (Currently amended) The method of claim 11, wherein the antibody or fragment thereof ~~detection agent~~ is attached to a substrate.
23. (Original) The method of claim 22, wherein the substrate is a gel, hydrogel, resin, bead, nitrocellulose, nylon filter, microtiter plate, culture flask, or polymeric material.
24. (Currently amended) The method of claim 11, wherein the antibody or fragment thereof ~~detection agent~~ further comprises a detectable moiety.
25. (Original) The method of claim 24, wherein the detectable moiety is a radionuclide, enzyme, specific binding pair component, colloidal dye substance, fluorochrome, reducing substance, chemiluminescent substance, electrochemiluminescent substance, electroactive substance, latex, digoxigenin, metal, particulate, dansyl lysine, antibody, protein A, protein G, electron dense material, or chromophore.
26. (Currently amended) The method according to claim 11, wherein the detection step (b) ~~[(c)]~~ is by enzyme-linked immunosorbent assay, immunonephelometry, agglutination, precipitation, immunodiffusion, immunoelectrophoresis, immunofluorescence, electrochemiluminescence, surface plasmon resonance, chemiluminescence, electrochemical immunoassay, radioimmunoassay, or immunohistochemistry.
27. (Currently amended) The method of claim 11, wherein the antibody ~~detection agent~~ is a monoclonal antibody.

28. (Currently amended) The method of claim 11, wherein the antibody ~~detection agent~~ is a polyclonal antibody.
29. (Currently amended) A method for monitoring treatment of thrombotic or thromboembolic disease caused by a thrombosis or embolism in a patient comprising:
- (a) contacting a physiological sample suspected of containing ~~an amount of~~ fibrinopeptide B (FPB) peptide and/or des-arginine FPB peptide with an amount of detection agent specific for FPB and/or des-arginine FPB peptides to form an FPB:detection agent complex, wherein the detection agent is the antiserum, antibody or fragment thereof of claim 1; has an IC50 for fibrinopeptide B and an IC50 for des-arginine fibrinopeptide B, wherein the IC50 for FPB differs from the IC50 for des-arginine fibrinopeptide B by less than 25%;
 - (b) detecting the amount of FPB and/or des-arginine FPB or the amount of FPB:detection agent complex in the sample;
 - (c) repeating steps (a) and (b) at a point later in time; and
 - (d) comparing the amounts determined in steps (b) and (c), and correlating the change in the amounts to determine whether the thrombosis or embolism is diminishing in size.
30. (Original) The monitoring method of claim 29, further comprising removing fibrinogen from the physiological sample.
31. (Currently amended) The method of claim 29, wherein the antibody ~~detection agent~~ is a monoclonal antibody.
32. (Currently amended) The method of claim 29, wherein the antibody ~~detection agent~~ is a polyclonal antibody.

Claims 33-34 (Canceled).

35. (Currently amended) A kit for detecting thrombotic or thromboembolic disease in a patient, the kit comprising:
- (a) a composition comprising a detection agent specific for Fibrinopeptide B (FPB) peptide and/or des-arginine FPB, wherein the detection agent is the antibody or fragment thereof of claim 1 ~~an antibody or fragment thereof that specifically recognizes FPB peptides defined by amino acid sequences SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 and SEQ ID NO:6 and,~~ wherein, the detection agent has an IC50 for fibrinopeptide B and an IC50 for des-arginine fibrinopeptide B, wherein the IC50 for FPB differs from the IC50 for des-arginine fibrinopeptide B by less than 25%; and
 - (b) packaging materials enclosing the composition.
36. (Currently amended) The kit of claim 35, wherein the antibody detection agent is a monoclonal antibody.
37. (Currently amended) The kit of claim 35, wherein the antibody detection agent is a polyclonal antibody.
38. (Currently amended) A kit for detecting thrombotic ~~or thrombotic~~ or thromboembolic disease in a patient, the kit comprising:
- (a) a composition comprising a detection agent specific for Fibrinopeptide B (FPB) peptides, wherein the detection agent is the antibody or fragment thereof of claim 1 ~~an antibody or fragment thereof that specifically recognizes the FPB peptides defined by amino acid sequences SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5 or SEQ ID NO:6; and~~
 - (b) reagents for measuring an indicator of urine volume or rate of glomerular filtration.

39. (Currently amended) The kit of claim 38, wherein the antibody ~~detection agent~~ is a monoclonal antibody.
40. (Currently amended) The kit of claim 38, wherein the antibody ~~detection agent~~ is a polyclonal antibody.
- 41-48. (Cancelled).
49. (New) The antiserum, or antibody or fragment thereof of claim 1, wherein the ratio of IC_{50} of fibrinogen to IC_{50} of FPB for said antiserum, or antibody or fragment thereof is about 0.5.
50. (New) The antiserum, or antibody or fragment thereof of claim 1, wherein said antiserum, or antibody or fragment thereof does not cross react with fibrinogen.
51. (New) The antiserum, or antibody or fragment thereof of claim 1 which cross-reacts with both FPB and des-arginine FPB.
52. (New) The antiserum, or antibody or fragment thereof of claim 51, wherein the ratio of IC_{50} of des-arginine FPB to IC_{50} of FPB for said antiserum, or antibody or fragment thereof is about 0.75.